

LISTING OF THE CLAIMS:

Claims 1-8 (Cancelled)

9. (Currently amended) A management protocol proxy ~~for performing network management between a first private network and a second network~~ global network, the private and global networks being connected via an Internet Protocol (IP) Network Address Translator (NAT) for translating between a private address system of the private network and a global address system of the global network, the management protocol proxy comprising:

an address translation processing unit that ~~translates a transmission source address, contained in~~ receives a packet ~~[[of]] containing~~ management protocol data transmitted from a monitored apparatus on the first private network ~~connected by the management protocol proxy, and translates a transmission source address contained in the received packet into a management virtual address belonging to a third management address system different from first the private and second global address systems of the first network and the second network, respectively, defined by the NAT to form management protocol proxy data comprising the virtual address and the management protocol data;~~

an assembly/disassembly processing unit that generates a management protocol proxy data packet including the packet of management protocol after the address translation proxy data, a transmission source address in which an address of the management protocol proxy is set as a transmission source address of the management protocol proxy data packet, and a transmission destination address in which an address of another management protocol proxy is set as a transmission destination address of the management protocol proxy data packet; and

[[a]] an interproxy communication unit that transmits the management protocol proxy data packet to said another management protocol proxy designated by the transmission destination ~~address~~ address, via the global network.

10. (Currently amended) The management protocol proxy according to claim 9, further comprising:

an address translation definition defining correspondence relationships between management addresses belonging to the ~~third~~ management address system ~~different from the first and second address systems defined by the NAT and real addresses,~~

wherein the address translation processing unit translates the transmission source address contained in the received packet ~~of a management protocol~~ into ~~a management~~ the virtual address, based on the address translation definition.

11. (Previously presented) The management protocol proxy according to claim 10, wherein the address translation processing unit further translates address information in data contained in the packet of management protocol.

12. (Currently amended) The management protocol proxy according to claim 11, wherein:

the management protocol is Simple Network Management Protocol (SNMP),

the received packet ~~of the management protocol~~ comprises an SNMP message, and

the data contained in the received packet ~~of the management protocol~~ is comprises a Protocol Data Unit (PDU).

13. (Previously presented) The management protocol proxy according to claim 12, wherein the address translation processing unit translates address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

14. (Currently amended) The management protocol proxy according to claim 9, wherein:

said another management protocol proxy comprises an address translation definition in ~~which~~ defining correspondence relationships between real addresses and ~~management~~ addresses belonging to the ~~third~~ management address system ~~are defined~~, and

an address translation processing unit of said another management protocol proxy translates the virtual address ~~information in data contained in the packet of management protocol~~, based on the address translation definition of said another management protocol proxy.

15. (Currently amended) The management protocol proxy according to claim 14, wherein:

the management protocol ~~comprises~~ is Simple Network Management Protocol (SNMP),

the received packet ~~of the management protocol is~~ comprises an SNMP message, and

the data contained in the received packet ~~of the management protocol is~~ comprises a Protocol Data Unit (PDU).

16. (Previously presented) The management protocol proxy according to claim 15, wherein the address translation processing unit of said another management proxy translates address information contained in the PDU of the SNMP message using the address translation

definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

17. (Previously presented) The management protocol proxy according to claim 9, wherein the management protocol proxy comprises a proxy server.

18. (Cancelled)

19. (Currently amended) A method of performing network management between a first private network and a ~~second network~~ global network, the private and global networks being connected via an Internet Protocol (IP) Network Address Translator (NAT) for translating between a private address system of the private network and a global address system of the global network, the method comprising:

translating a transmission source address, ~~contained in~~ address of a packet ~~[[of]]~~ containing management protocol ~~transmitted~~ data received from a monitored apparatus on the first private network ~~connected by a management protocol proxy, into to a management virtual~~ address belonging to a ~~third~~ management address system different from ~~first the private and second global~~ address systems of the ~~first network and the second network, respectively, defined by the NAT to form management protocol proxy data comprising the virtual address and the~~ management protocol data;

generating a management protocol proxy data packet including the ~~packet of~~ management protocol ~~after the address translation proxy data, a transmission source address in~~ which an address of ~~the~~ a management protocol proxy ~~is set~~ which is between the private and global networks as a transmission source address of the management protocol proxy data packet,

and ~~a transmission destination address in which~~ an address of another management protocol proxy ~~is set~~ as a transmission destination address of the management protocol proxy data packet;
and

transmitting the management protocol proxy data packet to said another management protocol proxy designated by the transmission destination ~~address~~ address, via the global network.

20. (Currently amended) The method according to claim 19, wherein:

the translating ~~of the transmission source address~~ comprises translating the transmission source address contained in the received packet ~~of management protocol into a management to~~
the virtual address, based on an address translation definition; and

the address translation definition defines correspondence relationships between ~~management~~ addresses belonging to the ~~third~~ management address system ~~different from the first and second address systems defined by the NAT and real addresses.~~

21. (Currently amended) The method according to claim 20, further comprising translating address information in data contained in the received packet ~~of management protocol~~.

22. (Currently amended) The method according to claim 21, wherein:

the management protocol is Simple Network Management Protocol (SNMP),

the received packet ~~of the management protocol~~ comprises an SNMP message, and

the data contained in the received packet ~~of the management protocol is~~ comprises a Protocol Data Unit (PDU).

23. (Currently amended) The method according to claim 22, wherein the translating ~~of address information in data contained in the packet of a management protocol~~ comprises translating address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

24. (Currently amended) The method according to claim 19, further comprising:
translating the virtual address ~~information in data~~ contained in the packet of management protocol proxy data at said another management protocol proxy, based on an address translation definition of said another management protocol proxy;

wherein the address translation definition of said another management protocol proxy defines correspondence relationships between real addresses and ~~management~~ addresses belonging to the ~~third~~ management address system.

25. (Currently amended) The method according to claim 24, wherein:
the management protocol comprises Simple Network Management Protocol (SNMP),
the received packet ~~of the management protocol~~ is comprises an SNMP message, and
the data contained in the received packet ~~of the management protocol~~ is comprises a Protocol Data Unit (PDU).

26. (Currently amended) The method according to claim 25, wherein the translating of the virtual address ~~information in data contained in the packet of management protocol~~ at said another management protocol proxy comprises translating address information contained in the

PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

27. (Cancelled)

28. (Currently amended) A program product comprising a computer readable storage medium and executable programming embodied on the medium, wherein execution of the programming causes a programmable device to perform ~~network steps for operation as a management protocol proxy~~ between a ~~first private~~ network and a ~~second global~~ network connected via an Internet Protocol (IP) Network Address Translator (NAT) ~~for translating between a private address system of the private network and a global address system of the global network,~~ comprising the steps ~~[[of]]~~ comprising:

translating a transmission source ~~address, contained in~~ address of a packet ~~[[of]]~~ containing management protocol ~~transmitted data received~~ from a monitored apparatus on the ~~first private~~ network ~~connected by a management protocol proxy, into~~ to a ~~management virtual~~ address belonging to a ~~third management~~ address system different from ~~first the private~~ and ~~second global~~ address systems ~~of the first network and the second network, respectively, defined by the NAT to form management protocol proxy data comprising the virtual address and the management protocol data;~~

generating a management protocol proxy data packet including the ~~packet of~~ management protocol ~~after the address translation proxy data, a transmission source address in~~ which an address of the management protocol proxy is ~~set~~ as a transmission source address of the management protocol proxy data packet, and ~~a transmission destination address in which an~~

address of another management protocol proxy is set as a transmission destination address of the management protocol proxy data packet; and

transmitting the management protocol proxy data packet to said another management protocol proxy designated by the transmission destination ~~address~~ address, via the global network.

29. (Currently amended) The product according to claim 28, wherein:

the translating of ~~the transmission source address~~ comprises translating the transmission source address contained in the received packet of ~~management protocol~~ into a management to the virtual address, based on an address translation definition; and

the address translation definition defines correspondence relationships between ~~management~~ addresses belonging to the ~~third~~ management address system ~~different from the first and second address systems defined by the NAT and real addresses~~.

30. (Currently amended) The product according to claim 29, wherein the steps performed further comprise translating address information in data contained in the received packet of ~~management protocol~~.

31. (Currently amended) The product according to claim 30, wherein:

the management protocol is Simple Network Management Protocol (SNMP),

the received packet of ~~the management protocol~~ comprises an SNMP message, and

the data contained in the received ~~packet of the management protocol~~ is comprises a Protocol Data Unit (PDU).

32. (Currently amended) The product according to claim 31, wherein the translating ~~of address information in data contained in the packet of management protocol~~ comprises translating address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

33. (Currently amended) The product according to claim 28, wherein:
the steps performed further comprise translating the virtual ~~address information in data contained in the packet of management protocol~~ at said another management protocol proxy, based on an address translation definition of said another management protocol proxy; and
the address translation definition of said another management protocol proxy defines correspondence relationships between real addresses and ~~management~~ addresses belonging to the ~~third~~ management address system.

34. (Currently amended) The product according to claim 33, wherein:
the management protocol comprises Simple Network Management Protocol (SNMP),
the received ~~packet of the management protocol~~ is comprises an SNMP message, and
the data contained in the received ~~packet of the management protocol~~ is comprises a Protocol Data Unit (PDU).

35. (Currently amended) The product according to claim 34, wherein the translating of the virtual ~~address information in data contained in the packet of management protocol~~ at said another management protocol proxy comprises translating address information contained in the

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PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

36. (cancelled)